

We claim:

1. An isolated peptide consisting of from 9 to 16 amino acids and containing SEQ ID NO: 23, SEQ ID NO: 24, or SEQ ID NO: 25.

2. The isolated peptide of claim 1, consisting of SEQ ID NO: 23, SEQ ID NO: 24, or SEQ ID NO: 25.

3. Method for determining presence of cytolytic T lymphocytes in a body fluid sample which are specific for complexes of HLA-A29 molecules and SEQ ID NO: 23, SEQ ID NO: 24, or SEQ ID NO: 25 comprising contacting a sample of cells which present HLA-A29 on their surface with a polypeptide comprising SEQ ID NO: 23, SEQ ID NO: 24, or SEQ ID NO: 25 under conditions favoring processing of said polypeptide to the polypeptide SEQ ID NO: 23, SEQ ID NO: 24 or SEQ ID NO: 25 and binding of SEQ ID NO: 23, SEQ ID NO: 24 or SEQ ID NO: 25 to said HLA-A29 molecules, contacting a body fluid sample believed to contain said cytolytic T lymphocytes to said cells presenting complexes of SEQ ID NO: 23, SEQ ID NO: 24 or SEQ ID NO: 25 and HLA-A29 on their surface, and determining at least one of (i) tumor necrosis factor released by cytolytic T lymphocytes or (ii) lysis of said cells presenting said complexes, as a determination of presence of said cytolytic T lymphocytes in said sample.

4. The method of claim 3, comprising determining release of tumor necrosis factor.

5. The method of claim 3, comprising determining lysis by determining release of radiolabelled chromium.

FOI 2015-0423260

09782745.071601

6. The isolated peptide of claim 1, wherein at least the N-terminus of SEQ ID NO: 23 is Tyr, or the second amino acid is Tyr, or the fifth amino acid is Arg, or the sixth amino acid is Pro, or the seventh amino acid is Arg, or the eighth amino acid is Arg.

7. Isolated nucleic acid molecule consisting of a nucleotide sequence which encodes the peptide of SEQ ID NO: 23, SEQ ID NO: 24 or SEQ ID NO: 25.

8. The isolated nucleic acid molecule of claim 7, consisting of a nucleotide sequence which encodes the peptide of SEQ ID NO: 21.

9. The isolated nucleic acid molecule of claim 8, consisting of a nucleotide sequence which encodes the peptide of SEQ ID NO: 22.

10. The isolated peptide of claim 1, wherein at least the N-terminus of SEQ ID NO: 24 is Tyr, or the second amino acid is Tyr, or the fourth amino acid is Pro, or the sixth amino acid is Pro, or the seventh amino acid is Arg, or the eighth amino acid is Arg.

11. The isolated peptide of claim 1, wherein at least the N-terminus of SEQ ID NO: 25 is Tyr, or the second amino acid is Tyr, or the fourth amino acid is Tyr, or the fourth amino acid is Pro, or the fifth amino acid is Arg, or the sixth amino acid is Pro, or the seventh amino acid is Arg.

12. A method of making a polypeptide consisting of the amino acid sequence of SEQ ID NO: 23, SEQ ID NO: 24 or SEQ ID NO: 25 comprising transforming or transfecting a cell with a nucleic acid molecule sequence which encodes said peptide to produce said peptide.

13. The method of claim 12, wherein said peptide consists of SEQ ID NO: 21.

14. The method of claim 12, wherein said peptide consists of SEQ ID NO: 22.

15. The method of claim 12, wherein said nucleic acid molecule is transformed or transfected into said cell in vivo.

16. The method of claim 12, wherein said nucleic acid molecule is transformed or transfected into said cell in vitro.

17. Isolated complex of an HLA-A29 molecule and the peptide of claim 1.

18. The isolated complex of claim 17 in a solution.

19. Method for determining presence of cytolytic T cells in a sample, wherein said cytolytic T cells have a receptor specific for complexes of HLA-A29 and a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 23, SEQ ID NO: 24, or SEQ ID NO: 25 with the isolated complex of claim 18, and determining binding of a cytolytic T cell to said isolated complex as a determination of said cytolytic T cells in said sample.

20. A method for stimulating cytolytic T cells in vivo, comprising administering the isolated complex of claim 18 to a subject, in an amount sufficient to stimulate cytolytic T cells specific for said complex.

21. The isolated complex of claim 17, wherein said complex is multimeric.

22. The isolated complex of claim 21, wherein said multimeric complex is a tetramer.

09782745.071601

ADD
A2

ADD
B1

ADD
C12